10/771652

=> fil req

FILE 'REGISTRY' ENTERED AT 10:32:42 ON 18 SEP 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 American Chemical Society (ACS)

09-18-06

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 17 SEP 2006 HIGHEST RN 907180-17-0 DICTIONARY FILE UPDATES: 17 SEP 2006 HIGHEST RN 907180-17-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

Effective September 24, 2006, Concord 3D coordinates will no longer be available. Please contact CAS Customer Care (http://www.cas.org/supp.html) if you have a need for 3D coordinates.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d 115 ide can tot

L15 ANSWER 1 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN

RN 731002-35-0 REGISTRY

ED Entered STN: 23 Aug 2004

CN Cyclo[glycyl-(β S)- β -methyl-L-phenylalanyl-O-(4-O- α -D-mannopyranosyl- α -D-mannopyranosyl)-D-tyrosyl-(3S)-3-[(4S)-2-amino-4,5-dihydro-1H-imidazol-4-yl]-L-seryl-(3R)-3-[(5S)-2-amino-4,5-dihydro-1- α -D-mannopyranosyl-1H-imidazol-5-yl]-D-seryl-L-seryl], bis(trifluoroacetate) (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C54 H78 N12 O25 . 2 C2 H F3 O2

SR CA

LC STN Files: CA, CAPLUS, CASREACT

7RIGENTY

RELATED SEQUENCES AVAILABLE WITH SEQLINK

CM 1

CRN 464875-69-2 CMF C54 H78 N12 O25

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PAGE 1-B

PAGE 2-A

но

CM 2

CRN 76-05-1 CMF C2 H F3 O2

- 2 REFERENCES IN FILE CA (1907 TO DATE)
- 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 142:6727

REFERENCE 2: 141:157463

L15 ANSWER 2 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN

RN 609337-21-5 REGISTRY

ED Entered STN: 27 Oct 2003

CN Cyclo[glycyl-(β S)- β -methyl-L-phenylalanyl-O-(4-O- α -D-mannopyranosyl- α -D-mannopyranosyl)-D-tyrosyl-(3S)-3-[(4S)-2-amino-4,5-dihydro-1H-imidazol-4-yl]-L-seryl-(3R)-3-[(5S)-2-amino-4,5-dihydro-1- α -D-mannopyranosyl-1H-imidazol-5-yl]-D-seryl-L-seryl], dihydrochloride (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C54 H78 N12 O25 . 2 C1 H

SR CA

LC STN Files: CA, CAPLUS, CASREACT

CRN (464875-69-2)

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PAGE 1-B

но

●2 HC1

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:157463

REFERENCE 2: 139:292472

L15 ANSWER 3 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN

RN 474328-98-8 REGISTRY

ED Entered STN: 22 Nov 2002

CN Cyclo[glycyl-β-methylphenylalanyl-O-(4-Ohexopyranosylhexopyranosyl)tyrosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4yl)seryl-3-(2-amino-1-hexopyranosyl-4,5-dihydro-1H-imidazol-5yl)serylseryl], bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

DR 474331-48-1

MF C54 H78 N12 O25 . 2 C2 H F3 O2

SR CA

LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

CM 1

CRN 474327-82-7 CMF C54 H78 N12 O25

RELATED SEQUENCES AVAILABLE WITH SEQLINK

PAGE 1-A

CM 2

CRN 76-05-1 CMF C2 H F3 O2

F— C— CO2H

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:338136

REFERENCE 2: 137:336791

L15 ANSWER 4 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN

RN 474328-87-5 REGISTRY

ED Entered STN: 22 Nov 2002

CN Cyclo[glycyl-β-methylphenylalanyl-O-(4-Ohexopyranosylhexopyranosyl)tyrosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4yl)seryl-3-(2-amino-1-hexopyranosyl-4,5-dihydro-1H-imidazol-5yl)serylseryl], dihydrochloride (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

MF C54 H78 N12 O25 . 2 Cl H

SR CA

LC STN Files: CA, CAPLUS

CRN (474327-82-7)

^{**}RELATED SEQUENCES AVAILABLE WITH SEQLINK**

PAGE 2-A

●2 HCl

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:338136

REFERENCE 2: 137:336791

L15 ANSWER 5 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN

RN 474327-82-7 REGISTRY

ED Entered STN: 22 Nov 2002

CN Cyclo[glycyl-β-methylphenylalanyl-O-(4-O-hexopyranosylhexopyranosyl)tyrosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4-yl)seryl-3-(2-amino-1-hexopyranosyl-4,5-dihydro-1H-imidazol-5-yl)serylseryl] (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

MF C54 H78 N12 O25

CI COM

SR CA

LC STN Files: CA, CAPLUS

PAGE 1-A

PAGE 2-A

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:338136

REFERENCE 2: 137:336791

L15 ANSWER 6 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN

RN 473722-21-3 REGISTRY

ED Entered STN: 15 Nov 2002

CN Cyclo[glycyl- β -methylphenylalanyl-O-(4-O- α -D-mannopyranosyl- α -D-mannopyranosyl)tyrosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4-yl)seryl-3-(2-amino-4,5-dihydro-1- α -D-mannopyranosyl-1H-imidazol-5-yl)serylseryl] (9CI) (CA INDEX NAME)

OTHER NAMES:

CN AC 98-1

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C54 H78 N12 O25

SR CA

LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

PAGE 1-A

PAGE 2-A

- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:136208

REFERENCE 2: 139:303798

REFERENCE 3: 137:329405

L15 ANSWER 7 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN

RN 464875-69-2 REGISTRY

ED Entered STN: 24 Oct 2002

CN Cyclo[glycyl-(β S)- β -methyl-L-phenylalanyl-O-(4-O- α -D-

 $\label{eq:continuous} $$ \max nopyranosyl-\alpha-D-mannopyranosyl)-D-tyrosyl-(3S)-3-[(4S)-2-amino-4,5-dihydro-1H-imidazol-4-yl]-L-seryl-(3R)-3-[(5S)-2-amino-4,5-dihydro-1-\alpha-D-mannopyranosyl-1H-imidazol-5-yl]-D-seryl-L-seryl] (9CI) (CA INDEX NAME) $$$

OTHER NAMES:

CN Mannopeptimycin α

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C54 H78 N12 O25

CI COM

SR CA

LC STN Files: CA, CAPLUS, CASREACT

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PAGE 1-B

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 10 REFERENCES IN FILE CA (1907 TO DATE)
 - 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 10 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 145:140899

REFERENCE 2: 144:407856

REFERENCE 3: 143:225639

REFERENCE 4: 141:243814

REFERENCE 5: 141:157463

REFERENCE 6: 140:236081

REFERENCE 7: 139:292472

REFERENCE 8: 139:127398

REFERENCE 9: 138:234668

REFERENCE 10: 137:275446

=> => fil hcaplus

FILE 'HCAPLUS' ENTERED AT 10:33:00 ON 18 SEP 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 18 Sep 2006 VOL 145 ISS 13 FILE LAST UPDATED: 17 Sep 2006 (20060917/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 123 bib abs hitstr retable tot

- L23 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN
- AN 2002:832983 HCAPLUS Full-text
- DN 137:336791
- TI Preparation of glycopeptide antibiotics
- IN Abbanat, Darren Robert; Bailey, Arthur Emery; Bernan, Valerie Sue; Greenstein, Michael; Lotvin, Jason Arnold; Ruppen, Mark Edward;

PΑ American Cyanamid Company, USA SO PCT Int. Appl., 515 pp. CODEN: PIXXD2 DT Patent LA English FAN.CNT 3 PATENT NO. DATE APPLICATION NO. DATE KIND _____ ----------____ A1 20021031 WO 2002-US13108 WO 2002086141 20020425 <--PT W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2445216 20021031 CA 2002-2445216 20020425 <--AΑ US 2003054508 A1 20030320 US 2002-132012 20020425 <--US 6713448 B2 20040330 US 2003087812 Α1 20030508 US 2002-131890 20020425 <--US 6914045 B2 20050705 US 2003092610 US 2002-131847 20020425 <--Α1 20030515 US 6964860 В2 20051115 EP 1390521 A1 20040225 EP 2002-764346 20020425 <--R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR US 2004158035 Α1 20040812 US 2004-771652 20040204 <--US 2005288221 20050427 <--Α1 20051229 US 2005-116149 PRAI US 2001-286396P Р. 20010425 <--Ρ US 2001-286244P 20010425 <--US 2001-286249P P 20010425 <--US 2002-131847 A3 20020425 US 2002-132012 A3 20020425 <--WO 2002-US13108 W 20020425 <--OS MARPAT 137:336791 The invention provides glycopeptide antibiotics and their derivs. prepared by AΒ fermentation of Streptomyces hygroscopicus strains and modified by organic transformation, biochem. transformation and biotransformation. These compds. are useful as antibiotic agents against gram pos. and neg. bacteria. IT 474327-82-7P RL: BCP (Biochemical process); BPN (Biosynthetic preparation); RCT (Reactant); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent) (preparation of glycopeptide antibiotics) RN 474327-82-7 HCAPLUS Cyclo[qlycyl- β -methylphenylalanyl-O-(4-O-CN hexopyranosylhexopyranosyl)tyrosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4yl)seryl-3-(2-amino-1-hexopyranosyl-4,5-dihydro-1H-imidazol-5yl)serylseryl) (9CI) (CA INDEX NAME)

Sutherland, Alan Gordon; He, Haiyin

HO
$$\rightarrow$$
 CH2-OH \rightarrow CH2-OH \rightarrow CH2-OH

· IT 474328-98-8P

RL: BPM (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of glycopeptide antibiotics)

RN 474328-98-8 HCAPLUS

CN Cyclo[glycyl- β -methylphenylalanyl-O-(4-O-

hexopyranosylhexopyranosyl)tyrosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4-yl)seryl-3-(2-amino-1-hexopyranosyl-4,5-dihydro-1H-imidazol-5-

yl)serylseryl], bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 474327-82-7

CMF C54 H78 N12 O25

CM 2

CRN 76-05-1 CMF C2 H F3 O2

IT 474328-87-5

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of glycopeptide antibiotics)

RN 474328-87-5 HCAPLUS

CN Cyclo[glycyl-β-methylphenylalanyl-O-(4-O-hexopyranosylhexopyranosyl)tyrosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4-yl)seryl-3-(2-amino-1-hexopyranosyl-4,5-dihydro-1H-imidazol-5-yl)serylseryl], dihydrochloride (9CI) (CA INDEX NAME)

PAGE 2-A

●2 HC1

IT 474328-98-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of glycopeptide antibiotics)

RN 474328-98-8 HCAPLUS

CN Cyclo[glycyl-β-methylphenylalanyl-O-(4-O-

 $\label{lem:hexopyranosylhexopyranosyl} hexopyranosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4-yl) seryl-3-(2-amino-1-hexopyranosyl-4,5-dihydro-1H-imidazol-5-yl) seryl-3-(2-amino-1-hexopyranosyl-4,5-dihydro-1H-imidazol-5-yl) seryl-3-(2-amino-1-hexopyranosyl-4,5-dihydro-1H-imidazol-5-yl) seryl-3-(2-amino-1-hexopyranosyl-4,5-dihydro-1H-imidazol-5-yl) seryl-3-(2-amino-1-hexopyranosyl-4,5-dihydro-1H-imidazol-4-yl) seryl-3-(2-amino-1-hexopyranosyl-4,5-dihydro-1H-imidazol-5-yl) seryl-3-(2-amino-1-hexopyranosyl-4,5-dihydro-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexopyranosyl-3-(2-amino-1-hexo$

yl)serylseryl], bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 474327-82-7 CMF C54 H78 N12 O25

PAGE 2-A

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RETABLE

Referenced Author (RAU)	Year VOL (RPY) (RVL	•	Referenced Work (RWK)	Referenced File
	=+====+====	=+======	+=========	===+======
de Voe	1970	1	US 3495004	HCAPLUS

L23 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN AN 2002:832646 HCAPLUS $\underline{Full-text}$

```
137:329405
DN
ΤI
     Substantially pure glycopeptide antibiotics AC-98-
     1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5
     Carter, Guy Thomas; He, Haiyin
ΙN
     American Cyanamid Company, USA
PΑ
     PCT Int. Appl., 51 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 3
     PATENT NO.
                         KIND
                                 DATE
                                             APPLICATION NO.
                                                                     DATE
PΙ
     WO 2002085403
                          Α1
                                 20021031
                                             WO 2002-US13073
                                                                     20020425 <--
         W: AE; AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2444907
                                 20021031
                                          CA 2002-2444907
                                                                     20020425 <--
                          AA
                                                                     20020425 <--
     US 2003054508
                          A1
                                 20030320
                                             US 2002-132012
     US 6713448
                          B2
                                 20040330
     US 2003087812
                                 20030508
                                             US 2002-131890 .
                                                                     20020425 <--
                          Α1
     US 6914045
                          В2
                                 20050705
     US 2003092610
                                             US 2002-131847
                                                                     20020425 <--
                          Α1
                                 20030515
     US 6964860
                          В2
                                 20051115
                                             EP 2002-739179
                                                                     20020425 <--
     EP 1399176
                          A1
                                 20040324
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     US 2004158035
                          Α1
                                 20040812
                                             US 2004-771652
                                                                     20040204 <--
     US 2005288221
                                 20051229
                                             US 2005-116149
                                                                     20050427 <--
                          Α1
PRAI US 2001-286249P
                          Ρ
                                 20010425
                                          <--
     US 2001-286244P
                          Ρ
                                 20010425
                                           <--
     US 2001-286396P
                          Р
                                 20010425
                                           <--
     US 2002-131847
                          А3
                                 20020425
     US 2002-132012
                          А3
                                 20020425
     WO 2002-US13073
                          W
                                 20020425
GΙ
```

Ι

- AB The invention provides new substantially pure antibiotics designated AC-98-1 (I), AC-98-2, AC-98-3, AC-98-4 and AC-98-5 derived from the microorganism Streptomyces hygroscopicus. The mixture was prepared from a fermentation and the compds. isolated and characterized and their antibacterial activity determined
- RN 473722-21-3 HCAPLUS CN Cyclo[glycyl- β -methylphenylalanyl-O-(4-O- α -D-mannopyranosyl- α -D-mannopyranosyl)tyrosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4-yl)seryl-3-(2-amino-4,5-dihydro-1- α -D-mannopyranosyl-1H-imidazol-5-yl)serylseryl] (9CI) (CA INDEX NAME)

PAGE 1-A

RETABLE

Referenced Author (RAU)

|Year | VOL | PG | | (RPY) | (RVL) | (RPG) |

| Referenced Work | (RWK)

| Referenced | File

```
|US 5939523 A
Bossi
                      11999 I
                              ı
                                                            IHCAPLUS
                      |1970 |
de Voe
                                - 1
                                        |US 3495004 A
                                                            IHCAPLUS
Malabarba
                      |1997 |
                                 |US 5648456 A
                                                            | HCAPLUS
    ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN
    2002:832574 HCAPLUS Full-text
ΑN
DN
    137:338136
TI
    Preparation of glycopeptide antibiotics
IN
    Abbanat, Darren Robert; Bernan, Valerie Sue; Dushin, Russell George;
    Greenstein, Michael; He, Haiyin; Lang, Stanley Albert; Newman,
    Howard; Sakya, Subas; Sum, Phaik-Eng; Sutherland, Alan Gordon; Wang,
    Ting-Zhong; Ruppen, Mark Edward; Bailey, Arthur Emery; Chi, Ping; Shen,
    Bo; Kong, Fangming; Lotvin, Jason Arnold
PA
    American Cyanamid Company, USA
SO
    PCT Int. Appl., 548 pp.
    CODEN: PIXXD2
DT
    Patent
    English
LA
FAN.CNT 3
    PATENT NO.
                      KIND
                              DATE
                                        APPLICATION NO.
                                                                DATE
                      ____
    _____
                              _____
                                         ______
                                                                _____
                       A2
                                         WO 2002-US13120
    WO 2002085307
                                                                20020425 <--
PI
                              20021031
    WO 2002085307
                       A3
                              20030925
           AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
        W:
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, UZ, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
            GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA,
            GN, GQ, GW, ML, MR, NE, SN, TD, TG
    CA 2444673
                              20021031
                                                                20020425 <--
                       AA
                                          CA 2002-2444673
    AU 2002303480
                       Α1
                              20021105
                                          AU 2002-303480
                                                                20020425 <--
                                         US 2002-132012
                                                                20020425 <--
    US 2003054508
                       A1
                              20030320
    US 6713448
                              20040330
                        B2
    US 2003087812
                                                                20020425 <--
                        A1
                              20030508
                                         US 2002-131890
    US 6914045
                        B2
                              20050705
                       A1
                                                                20020425 <--
    US 2003092610
                              20030515
                                         US 2002-131847
    US 6964860
                       В2
                              20051115
                                         EP 2002-731505
                                                                20020425 <--
    EP 1390056
                        A2
                              20040225
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
    US 2004158035
                        A1
                              20040812
                                          US 2004-771652
                                                                20040204 <--
    US 2005288221
                        A1
                              20051229
                                          US 2005-116149
                                                                20050427 <--
PRAI US 2001-286244P
                       P
                              20010425
                                       <--
    US 2001-286249P
                       Р
                              20010425
                                       <--
                       P
    US 2001-286396P
                              20010425 <--
                      A3
    US 2002-131847
                              20020425
                       A3 20020425
    US 2002-132012
                                        <--
                       W
    WO 2002-US13120
                              20020425
    MARPAT 137:338136
OS
GΙ
```

AB Glycopeptide antibiotics I [R1 = 1-phenylethyl, 1-(halophenyl)ethyl, benzyl, 1-(2-thienyl)ethyl, 1-cyclohexylethyl, cyclohexylmethyl, phenyl; R2 = CH2C6H2R2b(OR2a)R2c-3,4,5 (R2a, R2b, R2c = H, (cyclo)alkyl, etc.), 4-R2aO-substituted cyclohexylmethyl, cyclohexylmethyl, 2-substituted 5-benzoxazolyl or 5-benzofuranyl; R3, R4 = H, OH, a silyl or acyl group; R5, R6a-R6e = H, (cyclo)alkyl, alkenyl, alkynyl, acyl, 2- or 4-nitrophenyl, certain heterocyclic groups; R7 = H, (cyclo)alkyl, alkenyl, alkynyl, a silyl or acyl group (with provisos)] or their pharmaceutically-acceptable salts were prepared and assayed for biol. activity. Thus, cyclo[3-cyclohexyl-2-aminobutanoyl-O-(4-O-hexopyranosylhexopyranosyl)tyrosyl-3-(2-iminoimidazolidin-4-yl)seryl-3-(3-hexopyranosyl-2-iminoimidazolidin-4-yl)serylserylglycyl] (claimed compound) was prepared and showed MIC = 32 and 4 μg/mL for inhibition of Staphylococcus aureus (GC 1131) and Coagulase Neg. Staphylococcus (GC 4549), resp.

IT 474327-82-7P

RL: BCP (Biochemical process); BPN (Biosynthetic preparation); RCT (Reactant); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)

(preparation of glycopeptide antibiotics)

.RN 474327-82-7 HCAPLUS

CN Cyclo[glycyl-β-methylphenylalanyl-O-(4-Ohexopyranosylhexopyranosyl)tyrosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4yl)seryl-3-(2-amino-1-hexopyranosyl-4,5-dihydro-1H-imidazol-5yl)serylseryl] (9CI) (CA INDEX NAME)

PAGE 2-A

IT 474328-98-8P

RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of glycopeptide antibiotics)

RN 474328-98-8 HCAPLUS

CN Cyclo[glycyl- β -methylphenylalanyl-O-(4-O-

hexopyranosylhexopyranosyl)tyrosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4-yl)seryl-3-(2-amino-1-hexopyranosyl-4,5-dihydro-1H-imidazol-5-

yl)serylseryl], bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 474327-82-7

CMF C54 H78 N12 O25

CM 2

CRN 76-05-1 CMF C2 H F3 O2

IT 474328-87-5

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of glycopeptide antibiotics)

RN 474328-87-5 HCAPLUS

CN Cyclo[glycyl- β -methylphenylalanyl-O-(4-O-hexopyranosylhexopyranosyl)tyrosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4-yl)seryl-3-(2-amino-1-hexopyranosyl-4,5-dihydro-1H-imidazol-5-yl)serylseryl], dihydrochloride (9CI) (CA INDEX NAME)

PAGE 2-A

HCl

ΙT 474328-98-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of glycopeptide antibiotics)

RN 474328-98-8 HCAPLUS

CN Cyclo[glycyl- β -methylphenylalanyl-O-(4-O-

hexopyranosylhexopyranosyl)tyrosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4yl)seryl-3-(2-amino-1-hexopyranosyl-4,5-dihydro-1H-imidazol-5-

yl)serylseryl], bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 474327-82-7

CMF C54 H78 N12 O25

PAGE 2-A

CM 2

CRN 76-05-1 CMF C2 H F3 O2

=> fil uspatful FILE 'USPATFULL' ENTERED AT 10:33:17 ON 18 SEP 2006 CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 14 Sep 2006 (20060914/PD) FILE LAST UPDATED: 14 Sep 2006 (20060914/ED)

HIGHEST GRANTED PATENT NUMBER: US7107620 HIGHEST APPLICATION PUBLICATION NUMBER: US2006206975 CA INDEXING IS CURRENT THROUGH 12 Sep 2006 (20060912/UPCA) ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 14 Sep 2006 (20060914/PD) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2006 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2006

=> d 126 bib abs kwic hitstr tot

L26 ANSWER 1 OF 5 USPATFULL on STN 2005:331236 USPATFULL Full-text ΑN TΙ Glycopeptide antibiotics IN Lotvin, Jason Arnold, Union, NJ, UNITED STATES Ruppen, Mark Edward, Garnerville, NY, UNITED STATES PA Wyeth Holdings Corporation, Madison, NJ, UNITED STATES, 07940 (U.S. corporation) PΙ US 2005288221 A1 20051229 AΙ US 2005-116149 **A**1 20050427 (11) RLI . Division of Ser. No. US 2002-131847, filed on 25 Apr 2002, PENDING PRAI US 2001-286396P 20010425 (60) <--<--US 2001-286244P 20010425 (60) US 2001-286249P 20010425 (60) <--DT Utility FS APPLICATION LREP WYETH, PATENT LAW GROUP, 5 GIRALDA FARMS, MADISON, NJ, 07940, US CLMN Number of Claims: 18 ECL Exemplary Claim: 1-88 DRWN No Drawings LN.CNT 17141 CAS INDEXING IS AVAILABLE FOR THIS PATENT. AB The invention provides compounds of formula ##STR1## Wherein R.sup.1, R.sup.2, R.sup.3, R.sup.4, R.sup.5, R.sup.6a, R.sup.6b, R.sup.6c, R.sup.6d, R.sup.6e and R.sup.7 are defined in the specification. These compounds are

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

useful as antibiotic agents.

PRAI US 2001-286396P 20010425 (60) <--PRAI US 2001-286244P 20010425 (60) <--PRAI US 2001-286249P 20010425 (60) <--DETD . . . strain LL4600, the complex may also be prepared. Further

separation of the complex of antibiotics by HPLC into individual components AC-98-1, AC-98-2, AC-98-3,

AC-98-4 and AC-98-5 and determination of the chemical structures by spectroscopy is described in copending provisional patent application. filed Apr. 25, 2001. The structures of the individual components are shown below.

R.sup.1 R.sup.2 R.sup.3 R.sup.4 R.sup.5

AC- 98-1 ##STR113## ##STR114## OH OH ##STR115## AC- 98-2 ##STR116## ##STR117##

##STR118## OH OH

AC- 98-3 ##STR119## ##STR120## AC-. .

IT 473721-39-0P, AC 98-5 **473722-21-3P**, AC 98-1 473722-22-4P, AC 98-2 473722-23-5P, AC 98-3 473722-24-6P, AC 98-4

(substantially pure AC-98 glycopeptide antibiotics)

IT 473722-21-3P, AC 98-1

(substantially pure AC-98 glycopeptide antibiotics)

RN 473722-21-3 USPATFULL

CN Cyclo[glycyl- β -methylphenylalanyl-O-(4-O- α -D-mannopyranosyl-

 α -D-mannopyranosyl)tyrosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4-

yl)seryl-3-(2-amino-4,5-dihydro-1- α -D-mannopyranosyl-1H-imidazol-5-

yl)serylseryl] (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

L26 ANSWER 2 OF 5 USPATFULL on STN

AN 2004:204143 USPATFULL Full-text

TI Substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5

IN Carter, Guy Thomas, New City, NY, UNITED STATES
He, Haiyin, Washington Township, NJ, UNITED STATES

PA Wyeth Holdings Corporation, Madison, NJ, 07940 (U.S. corporation)

```
PΙ
       US 2004158035
                               20040812
                          Α1
ΑI
       US 2004-771652
                          A1
                               20040204 (10)
       Division of Ser. No. US 2002-132012, filed on 25 Apr 2002, GRANTED, Pat.
RLI
       No. US 6713448
PRAI
       US 2001-286249P
                           20010425 (60)
                                                                     <--
       US 2001-286244P
                           20010425 (60)
                                                                     <--
       US 2001-286396P
                           20010425 (60)
                                                                     <--
DT
       Utility
FS
       APPLICATION
LREP
       WYETH, PATENT LAW GROUP, FIVE GIRALDA FARMS, MADISON, NJ, 07940
CLMN
       Number of Claims: 30
ECL
       Exemplary Claim: 1
DRWN
       15 Drawing Page(s)
LN.CNT 844
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       The invention provides new substantially pure antibiotics designated AC-98-1,
       AC-98-2, AC-98-3, AC-98-4 and AC-98-5 derived from the microorganism
       Streptomyces hygroscopicus.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
TΙ
       Substantially pure glycopeptide antibiotics AC-98-
       1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5
       US 2001-286249P
PRAI
                           20010425 (60)
                                                                     <--
       US 2001-286244P
                                                                     <--
PRAI
                           20010425 (60)
PRAI
       US 2001-286396P
                           20010425 (60)
                                                                     <--
AΒ
       The invention provides new substantially pure antibiotics designated AC-98-1,
       AC-98-2, AC-98-3, AC-98-4 and AC-98-5 derived from the microorganism
       Streptomyces hygroscopicus.
SUMM
       [0003] This invention relates to new substantially pure glycopeptide
       antibiotics, designated AC-98-1, AC-98-2,
      AC-98-3, AC-98-4 and AC-98-5, or pharmaceutically acceptable salts
       thereof, to methods for the preparation and isolation of such
       antibiotics,. .
DRWD
       [0006] FIG. 1 shows the infrared absorption spectrum of AC-
DRWD
       [0011] FIG. 6 shows the proton nuclear magnetic resonance spectrum of
      AC-98-1
DRWD
       [0016] FIG. 11 shows the carbon-13 nuclear magnetic resonance spectrum
      of AC-98-1
DETD
       [0021] New substantially pure glycopeptide antibiotics designated
      AC-98-1, AC-98-2, AC-98-3, AC-98-4 and
      AC-98-5 or pharmaceutically acceptable salts thereof have now been
       found.
DETD
       [0022] The structure of AC-98-1 is:
       ##STR1##
DETD
       [0023] The physico chemical characteristics of AC-98
       -1 are as follows:
DETD
       [0063] In particular the structures of substantially pure AC-
       98-1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5 are:
       ##STR6## ##STR7##
       [0064] This invention provides a method of preparing, separating and
DETD
       isolating substantially pure glycopeptide antibiotics AC-
       98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 from a
       recovered complex mixture.
DETD
       [0065] This invention further provides a method for preparing
      substantially pure glycopeptide antibiotic AC-98-
       1 comprising the steps of:
DETD
                strain of Streptomyces hygroscopicus in a suitable culture
```

medium under aerobic conditions to produce a mixture of AC-98

- antibiotics containing AC-98-1;
- DETD [0067] b. recovering said mixture of AC-98 antibiotics containing AC-98-1; and
- DETD [0068] c. separating and isolating substantially pure AC-98-1 as the trifluoroacetic acid salt by reverse phase high pressure liquid chromatography with a mobile phase gradient of about 11%. . .
- DETD [0090] It is understood that this invention encompasses all crystalline forms of substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5. Further, substantially pure antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5 may be obtained as pharmaceutically acceptable salts which are those derived from such organic and. . .
- DETD [0092] The present invention accordingly provides a pharmaceutical composition which comprises a substantially pure glycopeptide antibiotic AC-98-1, AC-98-2, AC-98-3, AC-98-4 or AC-98-5 or a mixture thereof in combination or association with a pharmaceutically acceptable carrier. In particular, the present invention provides a pharmaceutical composition which comprises an effective amount of substantially pure AC-98-1, AC-98-2, AC-98-3, AC-98-4 or AC-98-5 or a mixture thereof and a pharmaceutically acceptable carrier.
- DETD . . . bacterial infections in warm blooded animals which comprise administering to said animals an antibacterially effective amount of a substantially pure AC-98-1, AC-98-2, AC-98-3, AC-98-4 or AC-98-5 or a mixture thereof. Warm blooded animals includes humans.
- DETD [0094] New substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5 are obtained from a complex AC-98 antibiotic mixture which is produced by aerobic fermentation of. . .
- DETD . . . collected as a AC-98 antibiotic mixture following washing with methanol and acetone. Separating the AC-98 antibiotic mixture into substantially pure AC-98-1, AC-98-2, AC-98-3, AC-98-4 or AC-98-5 is described in the present application.
- DETD [0096] Experimental efforts showed that the AC-98 mixture could not be effectively separated into substantially pure AC-98-1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5 using reverse phase HPLC on C-18 columns which included Dynamax and Phenomenex C-18 columns (60A. . . acid to control the acidity in the range of pH 3.5 and 5.5. The purification of the substantially pure antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 from the AC-98 antibiotic mixture is finally achieved by dissolving the AC-98 mixture in water. . .
- DETD [0097] Separating the substantially pure AC-98-1, AC-98-2, AC-98-3, AC-98-4 or AC-98-5 each from the others is accomplished using reverse phase HPLC on a C18 column (YMC. .
- DETD [0098] Substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5 of this invention are defined as having, a purity of at least 85% when separated each from the others, as determined by high pressure liquid chromatography(HPLC). Preferably, substantially pure AC-98-1 is obtained with a purity of at least 92%, substantially pure AC-98-2 is obtained with a purity of at least. . .
- DETD [0099] The substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 are isolated, purified and characterized from the AC-98 antibiotic mixture by dissolving the mixture in. . .
- DETD . . . suitable culture medium is continued for about 24 to about 240

hours to produce a mixture of AC-98 antibiotics containing AC-98-1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5. In particular, suitable liquid culture media are listed in Table A.

[0109] Substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 derive their utility from their antibacterial activity. In particular the

substantially pure antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5 are active against methicillin-susceptible and methicillin-resistant strains of

staphylococci, against penicillin-susceptible and penicillin-resistant

streptococci, and.

DETD

DETD [0110] In therapeutic use, the substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 of this invention may be administered in the form of conventional pharmaceutical compositions appropriate for. compositions may be formulated so as to be suitable for oral, parenteral or topical administration. The substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 may be combined in admixture with a nontoxic pharmaceutical carrier, which carrier may take a. . .

DETD [0111] When the substantially pure glycopeptide antibiotics AC -98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 are employed for the above utility, they can be combined with one or more pharmaceutically. . . Such pharmaceutical preparations may contain, for example, from about 0.05 up to about 90% of the substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 in combination with the carrier, more usually between about 5% and 60% by weight.

DETD [0112] An antibacterially effective amount of substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 or AC-98-5 from about 0.5 mg/k body weight to about 200.0 mg/kg of body weight should be.

DETD [0113] Additionally, the antibacterially effective amount of the substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 or AC-98-5 may be administered at a dosage and frequency without inducing side effects commonly experienced . . effects to normal tissues caused by administration at or above the antibacterially effective amount of the substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 or AC-98-5.

DETD [0116] These substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 may also be administered parenterally or intraperitoneally. Solutions or suspensions of these active compounds as. . .

[0120] The mixture of AC-98 antibiotics is analyzed by HPLC to contain DETD mainly five components, designated as AC-98-1 (17%), AC-98-2 (19%), AC-98-3 (15%), AC-98-4 (29%), and AC-98-5 (4%). The relative quantity of each antibiotic is calculated

DETD Substantially Pure Glycopeptide Antibiotics AC-98-1, AC-98-2, AC-98-3, and AC-98-4 from a Mixture of AC-98 Antibiotics

DETD . . . and upon evaporation infrared, proton nuclear magnetic resonance, and carbon 13 magnetic resonance spectra recorded. The substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 and a mixture as trifluoroacetate salts are isolated and listed in Table 1.

TABLE 1

RETENTION WEIGHT COMPONENT TIME COLLECTED* Substantially Pure AC-98-1 20 MINUTES 35 mg Substantially Pure AC-98-2 28 MINUTES 29 mg Substantially Pure AC-98-3 32 MINUTES 25 mg Substantially Pure. . . DETD [0129] The substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 are tested in the following standard pharmacological test procedures. DETD [0130] The in vitro antibacterial activity of substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 from Examples 2 and 3 is determined against a spectrum of bacteria by a standard agar dilution method. Mueller-Hinton agar containing 5% sheep blood and two-fold decreasing concentrations of substantially pure glycopeptide antibiotics AC -98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 from Examples 2 and 3 are poured into petri dishes. The agar surfaces are inoculated. . . for that strain. The results are given in Table II. Table II. In vitro antibacterial activity of substantially pure antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 from Examples 2 and 3 TABLE II In vitro antibacterial activity of substantially pure antibiotics AC-AC-98-2, AC-98-3, AC-98-4, and AC-98-5 from Examples 2 and 3 MIC (mg/mL) AC-98-1 Organism AC-98-2 AC-98-3 AC-98-4 AC-98-5 8 Staphylococcus aureus (NEMC-89-4) >128 64 128 8 Staphylococcus aureus (ID-2371) >128 Staphylococcus aureus (ID-2727). . [0131] The in vivo antibacterial activity of substantially pure glycopeptides AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 is established by infecting female CD-1 mice from Charles River Laboratories, weighing 20+/-2 g each,. . . of water. The results of this test are given in Table III. TABLE III In vivo antibacterial activity of substantially pureglycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 from Examples 2 and 3 ED.sub.50 (iv, mq/kq) Compound Staphylococcus aureus AC-98-1 20 AC-98-2 >32 AC-98-3 3.8 AC-98-4 2.6 AC-98-5 0.6 CLM What is claimed is:

21. A method for preparing substantially pure glycopeptide antibiotic

AC-98-1 comprising the steps of: a.

cultivating a suitable producing strain of Streptomyces hygroscopicus in a suitable culture medium under aerobic conditions to produce a mixture of AC-98 antibiotics containing AC-98-1;

b. recovering said mixture of AC-98 antibiotics containing AC-

98-1; and c. separating and isolating substantially

pure AC-98-1 as the trifluoroacetic acid

salt by reverse phase high pressure liquid chromatography with a mobile phase gradient of about 11%. . .

473721-39-0P, AC 98-5 **473722-21-3P**, AC 98-1 473722-22-4P, AC

98-2 473722-23-5P, AC 98-3 473722-24-6P, AC 98-4

(substantially pure AC-98 glycopeptide antibiotics)

IT 473722-21-3P, AC 98-1

ΙT

(substantially pure AC-98 glycopeptide antibiotics)

RN 473722-21-3 USPATFULL

CN Cyclo[glycyl- β -methylphenylalanyl-O-(4-O- α -D-mannopyranosyl-

 α -D-mannopyranosyl) tyrosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4-

yl) seryl-3-(2-amino-4,5-dihydro-1- α -D-mannopyranosyl-1H-imidazol-5-

yl)serylseryl] (9CI) (CA INDEX NAME)

PAGE 1-A

```
L26 ANSWER 3 OF 5 USPATFULL on STN
       2003:134523 USPATFULL Full-text
AN
TΙ
       Glycopeptide antibiotics
TN
       Abbanat, Darren Robert, Cornwall, NY, UNITED STATES
       Bailey, Arthur Emery, Bethel, CT, UNITED STATES
       Bernan, Valerie Sue, New City, NY, UNITED STATES
       Greenstein, Michael, Suffern, NY, UNITED STATES
       Lotvin, Jason Arnold, Union, NJ, UNITED STATES
       Ruppen, Mark Edward, Garnerville, NY, UNITED STATES
       Sutherland, Alan Gordon, New City, NY, UNITED STATES
       He, Haiyin, Washington Township, NJ, UNITED STATES
PA
       American Cyanamid Company, Madison, NJ (U.S. corporation)
PI
      US 2003092610
                          A1
                               20030515
       US 6964860
                          B2
                               20051115
                               20020425 (10)
AΙ
       US 2002-131847
                          A 1
PRAI
      US 2001-286396P
                                                                     <--
                          20010425 (60)
     · US 2001-286249P
                          20010425 (60)
                                                                     <--
      US 2001-286244P
                          20010425 (60)
                                                                     <--
      Utility
DT
FS
      APPLICATION
      WYETH, PATENT LAW GROUP, FIVE GIRALDA FARMS, MADISON, NJ, 07940
LREP
CLMN
      Number of Claims: 105
ECL
      Exemplary Claim: 1
DRWN
      No Drawings
LN.CNT 18536
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AΒ
       The invention provides compounds of formula ##STR1##
```

Wherein R.sup.1, R.sup.2, R.sup.3, R.sup.4, R.sup.5, R.sup.6a, R.sup.6b, R.sup.6c, R.sup.6d, R.sup.6e and R.sup.7 are defined in the specification. These compounds are useful as antibiotic agents.

```
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
PRAI
      US 2001-286396P
                         20010425 (60)
                                                                    <--
      US 2001-286249P
PRAI
                          20010425 (60)
                                                                    <--
PRAI
                                                                    <--
      US 2001-286244P
                          20010425 (60)
SUMM
       . . . strain LL4600, the complex may also be prepared. Further
      separation of the complex of antibiotics by HPLC into individual
      components AC-98-1, AC-98-2, AC-98-3,
      AC-98-4 and AC-98-5 and determination of the chemical structures by
      spectroscopy is described in copending provisional patent application.
       . . filed Apr. 25, 2001. The structures of the individual components
      are shown below.
```

R.sup.1 R.sup.2 R.sup.3 R.sup.4 R.sup.5

```
AC- 98-1 ##STR109## ##STR110##
OH OH ##STR111##

AC- 98-2 ##STR112## ##STR113##
OH OH ##STR114##

AC- 98-3 ##STR115## ##STR116##
```

##STR117##

ОН

OH

AC-. .

IT 473721-39-0P, AC 98-5 **473722-21-3P**, AC 98-1 473722-22-4P, AC 98-2 473722-23-5P, AC 98-3 473722-24-6P, AC 98-4 (substantially pure AC-98 glycopeptide antibiotics)

IT **473722-21-3P**, AC 98-1

(substantially pure AC-98 glycopeptide antibiotics)

RN 473722-21-3 USPATFULL

CN Cyclo[glycyl- β -methylphenylalanyl-O-(4-O- α -D-mannopyranosyl- α -D-mannopyranosyl)tyrosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4-yl)seryl-3-(2-amino-4,5-dihydro-1- α -D-mannopyranosyl-1H-imidazol-5-yl)serylseryl] (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

L26 ANSWER 4 OF 5 USPATFULL on STN

AN 2003:127597 USPATFULL Full-text

TI Glycopeptide antibiotics

IN Abbanat, Darren Robert, Cornwall, NY, UNITED STATES Bernan, Valerie Sue, New City, NY, UNITED STATES Dushin, Russell George, Garrison, NY, UNITED STATES Greenstein, Michael, Suffern, NY, UNITED STATES

He, Haiyin, Washington Township, NJ, UNITED STATES Lang, Stanley Albert, Carlsbad, CA, UNITED STATES Newman, Howard, Monsey, NY, UNITED STATES Sakya, Subas, East Lyme, CT, UNITED STATES Sum, Phaik-Eng, Pomona, NY, UNITED STATES Sutherland, Alan Gordon, New City, NY, UNITED STATES Wang, Ting-Zhong, Spring Valley, NY, UNITED STATES Lotvin, Jason Arnold, Union, NJ, UNITED STATES Ruppen, Mark Edward, Garnerville, NY, UNITED STATES Bailey, Arthur Emery, Bethel, CT, UNITED STATES Cai, Ping, New City, NY, UNITED STATES Shen, Bo, New berry Park, CA, UNITED STATES Kong, Fangming, River Vale, NJ, UNITED STATES PΑ American Cyanamid Company, Madison, NJ, UNITED STATES (U.S. corporation) PΙ US 2003087812 A1 20030508 US 6914045 20050705 B2 US 2002-131890 AΙ A1 20020425 (10) <--PRAI US 2001-286396P 20010425 (60) 20010425 (60) US 2001-286249P <--US 2001-286244P 20010425 (60) <--DTUtility FS APPLICATION Daniel B. Moran, Five Giralda Farms, Madison, NJ, 07940 LREP CLMN Number of Claims: 128 ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 18987 CAS INDEXING IS AVAILABLE FOR THIS PATENT. AΒ The invention provides compounds of formula ##STR1##

Wherein R.sup.1, R.sup.2, R.sup.3, R.sup.4, R.sup.5, R.sup.6a, R.sup.6b, R.sup.6c, R.sup.6d, R.sup.6e and R.sup.7 are defined in the specification. These compounds are useful as antibiotic agents.

These compounds are useful as antibiotic agents.

PRAI US 2001-286396P 20010425 (60) <--US 2001-286249P PRAI 20010425 (60) <--US 2001-286244P 20010425 (60) PRAI SUMM . . . strain LL4600, the complex may also be prepared. Further separation of the complex of antibiotics by HPLC into individual components AC-98-1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5 and determination of the chemical structures by spectroscopy is described in copending provisional patent application. . . filed Apr. 25, 2001. The structures of the individual components are shown below.

R.sup.1 R.sup.2 R.sup.3 R.sup.4 R.sup.5

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AC- 98-1 ##STR110## ##STR111## OH OH ##STR112##

AC- 98-2 ##STR113## ##STR114## OH OH ##STR115## AC- 98-3 ##STR116## ##STR117## OH OH ##STR118##

IT 473722-21-3P, AC 98-1

(substantially pure AC-98 glycopeptide antibiotics)

RN 473722-21-3 USPATFULL

CN Cyclo[glycyl- β -methylphenylalanyl-O-(4-O- α -D-mannopyranosyl- α -D-mannopyranosyl)tyrosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4-yl)seryl-3-(2-amino-4,5-dihydro-1- α -D-mannopyranosyl-1H-imidazol-5-yl)serylseryl] (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

L26 ANSWER 5 OF 5 USPATFULL on STN

AN 2003:78588 USPATFULL Full-text

TI Substantially pure glycopeptide antibotics AC-98-1; AC-98-2; AC-98-3; AC-98-4 AND AC-98-5

IN Carter, Guy Thomas, New City, NY, UNITED STATES

```
He, Haiyin, Washington Township, NJ, UNITED STATES
PΑ
       American Cyanamid Company, Madison, NJ, UNITED STATES (U.S. corporation)
                               20030320
PT
       US 2003054508
                          A1
       US 6713448
                          B2
                               20040330
ΑI
       US 2002-132012
                          Α1
                               20020425 (10)
PRAI
      US 2001-286396P
                          20010425 (60)
                                                                     <--
       US 2001-286244P
                           20010425 (60)
                                                                     <--
       US 2001-286249P
                                                                     <--
                           20010425 (60)
DT
       Utility
FS
      APPLICATION
       Daniel B. Moran, Five Giralda Farms, Madison, NJ, 07940
LREP
CLMN
       Number of Claims: 30
ECL
       Exemplary Claim: 1
DRWN
      15 Drawing Page(s)
LN.CNT 835
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The invention provides new substantially pure antibiotics designated AC-98-1,
       AC-98-2, AC-98-3, AC-98-4 and AC-98-5 derived from the microorganism
      · Streptomyces hygroscopicus.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ΤI
       Substantially pure glycopeptide antibotics AC-98-
       1; AC-98-2; AC-98-3; AC-98-4 AND AC-98-5
PRAI
       US 2001-286396P
                           20010425 (60)
                                                                     <--
PRAI
      US 2001-286244P
                           20010425 (60)
                                                                     <--
      US 2001-286249P 20010425 (60)
PRAI
                                                                     <--
       The invention provides new substantially pure antibiotics designated AC-98-1,
AΒ
       AC-98-2, AC-98-3, AC-98-4 and AC-98-5 derived from the microorganism
       Streptomyces hygroscopicus.
SUMM
       [0003] This invention relates to new substantially pure glycopeptide
       antibiotics, designated AC-98-1, AC-98-2,
      AC-98-3, AC-98-4 and AC-98-5, or pharmaceutically acceptable salts
      thereof, to methods for the preparation and isolation of such
       antibiotics,.
DRWD
       [0006] FIG. 1 shows the infrared absorption spectrum of AC-
       [0011] FIG. 6 shows the proton nuclear magnetic resonance spectrum of
DRWD
      AC-98-1
DRWD
       [0016] FIG. 11 shows the carbon-13 nuclear magnetic resonance spectrum
      of AC-98-1
DETD
       [0021] New substantially pure glycopeptide antibiotics designated
      AC-98-1, AC-98-2, AC-98-3, AC-98-4 and
      AC-98-5 or pharmaceutically acceptable salts thereof have now been
      found.
DETD
       [0022] The structure of AC-98-1 is:
       ##STR1##
DETD
       [0023] The physico chemical characteristics of AC-98
       -1 are as follows:
DETD
       [0067] In particular the structures of substantially pure AC-
       98-1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5 are:
       ##STR6##
DETD
       [0068] This invention provides a method of preparing, separating and
       isolating substantially pure glycopeptide antibiotics AC-
      98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 from a
      recovered complex mixture.
DETD
       [0069] This invention further provides a method for preparing
       substantially pure glycopeptide antibiotic AC-98-
      1 comprising the steps of:
DETD
       . . strain of Streptomyces hygroscopicus in a suitable culture
```

- medium under aerobic conditions to produce a mixture of AC-98 antibiotics containing AC-98-1;
- DETD [0071] b. recovering said mixture of AC-98 antibiotics containing AC-98-1; and
- DETD [0072] c. separating and isolating substantially pure AC-98-1 as the trifluoroacetic acid salt by reverse phase high pressure liquid chromatography with a mobile phase gradient of about 11%.
- DETD [0094] It is understood that this invention encompasses all crystalline forms of substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5. Further, substantially pure antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5 may be obtained as pharmaceutically acceptable salts which are those derived from such organic and. . .
- DETD [0096] The present invention accordingly provides a pharmaceutical composition which comprises a substantially pure glycopeptide antibiotic AC-98-1, AC-98-2, AC-98-3, AC-98-4 or AC-98-5 or a mixture thereof in combination or association with a pharmaceutically acceptable carrier. In particular, the present invention provides a pharmaceutical composition which comprises an effective amount of substantially pure AC-98-1, AC-98-2, AC-98-3, AC-98-4 or AC-98-5 or a mixture thereof and a pharmaceutically acceptable carrier.
- DETD . . . bacterial infections in warm blooded animals which comprise administering to said animals an antibacterially effective amount of a substantially pure AC-98-1, AC-98-2, AC-98-3, AC-98-4 or AC-98-5 or a mixture thereof. Warm blooded animals includes humans.
- DETD [0098] New substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5 are obtained from a complex AC-98 antibiotic mixture which is produced by aerobic fermentation of. . . collected as a AC-98 antibiotic mixture following washing with methanol and acetone. Separating the AC-98 antibiotic mixture into substantially pure AC-98-1, AC-98-2, AC-98-3, AC-98-4 or AC-98-5 is described in the present application.
- DETD [0099] Experimental efforts showed that the AC-98 mixture could not be effectively separated into substantially pure AC-98
 1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5 using reverse phase HPLC on C-18 columns which included Dynamax and Phenomenex C-18 columns (60A. . . acid to control the acidity in the range of pH 3.5 and 5.5. The purification of the substantially pure antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 from the AC-98 antibiotic mixture is finally achieved by dissolving the AC-98 mixture in water. . .
- DETD [0100] Separating the substantially pure AC-98-1, AC-98-2, AC-98-3, AC-98-4 or AC-98-5 each from the others is accomplished using reverse phase HPLC on a C18 column (YMC. .
- DETD [0101] Substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5 of this invention are defined as having, a purity of at least 85% when separated each from the others, as determined by high pressure liquid chromatography(HPLC). Preferably, substantially pure AC-98-1 is obtained with a purity of at least 92%, substantially pure AC-98-2 is obtained with a purity of at least . . .
- DETD [0102] The substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 are isolated, purified and characterized from the AC-98 antibiotic mixture by dissolving the mixture in. . .

```
DETD . . . suitable culture medium is continued for about 24 to about 240 hours to produce a mixture of AC-98 antibiotics containing AC-98-1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5. In
```

particular, suitable liquid culture media are listed in Table A.

- DETD [0110] Substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 derive their utility from their antibacterial activity. In particular the substantially pure antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 and AC-98-5 are active against methicillin-susceptible and methicillin-resistant strains of staphylococci, against penicillin-susceptible and penicillin-resistant streptococci, and. . .
- DETD [0111] In therapeutic use, the substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 of this invention may be administered in the form of conventional pharmaceutical compositions appropriate for. . . compositions may be formulated so as to be suitable for oral, parenteral or topical administration. The substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 may be combined in admixture with a nontoxic pharmaceutical carrier, which carrier may take a. . .
- DETD [0112] When the substantially pure glycopeptide antibiotics AC -98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 are employed for the above utility, they can be combined with one or more pharmaceutically. . . Such pharmaceutical preparations may contain, for example, from about 0.05 up to about 90% of the substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 in combination with the carrier, more usually between about 5% and 60% by weight.
- DETD [0113] An antibacterially effective amount of substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 or AC-98-5 from about 0.5 mg/kg of body weight to about 200.0 mg/kg of body weight should. . .
- DETD [0114] Additionally, the antibacterially effective amount of the substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 or AC-98-5 may be administered at a dosage and frequency without inducing side effects commonly experienced with. . . effects to normal tissues caused by administration at or above the antibacterially effective amount of the substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 or AC-98-5.
- DETD [0117] These substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 may also be administered parenterally or intraperitoneally. Solutions or suspensions of these active compounds as. . .
- DETD [0121] The mixture of AC-98 antibiotics is analyzed by HPLC to contain mainly five components, designated as AC-98-1 (17%), AC-98-2 (19%), AC-98-3 (15%), AC-98-4 (29%), and AC-98-5 (4%). The relative quantity of each antibiotic is calculated based on. . .
- DETD Substantially Pure Glycopeptide Antibiotics AC-98-1, AC-98-2, AC-98-3, and AC-98-4 From a Mixture of AC-98 Antibiotics
- DETD . . . and upon evaporation infrared, proton nuclear magnetic resonance, and carbon 13 magnetic resonance spectra recorded. The substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4 and a mixture as trifluoroacetate salts are isolated and listed in Table 1.

WEIGHT COMPONENT RETENTION TIME COLLECTED* Substantially Pure AC-98-1 20 MINUTES 35 mg Substantially Pure AC-98-2 28 MINUTES 29 mg Substantially Pure AC-98-3 Substantially Pure AC-98-4 32 MINUTES 25 mg 37 MINUTES. . [0130] The substantially pure glycopeptide antibiotics AC-DETD 98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 are tested in the following standard pharmacological test procedures. [0131] The in vitro antibacterial activity of substantially pure DETD glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 from Examples 2 and 3 is determined against a spectrum of bacteria by a standard agar dilution method. Mueller-Hinton agar containing 5% sheep blood and two-fold decreasing concentrations of substantially pure glycopeptide antibiotics AC -98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 from Examples 2 and 3 are poured into petri dishes. The agar surfaces are inoculated. . . concentration for that strain. The results are given in Table II. TABLE II In vitro antibacterial activity of substantially pure antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 from Examples 2 and 3 MIC (mg/mL) Organism AC-98-1 AC-98-2 AC-98-3 AC-98-5 AC-98-4 Staphylococcus aureus (NEMC-89-4) 8 >128 64 Staphylococcus aureus (ID-2371) >128 128 8 8 Staphylococcus aureus (ID-2727). . DETD [0132] The in vivo antibacterial activity of substantially pure glycopeptides AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 is established by infecting female CD-1 mice from Charles River Laboratories, weighing 20+/-2 g each, . . . water. The results of this test are given in Table III. TABLE III In vivo antibacterial activity of substantially pure glycopeptide antibiotics AC-98-1, AC-98-2, AC-98-3, AC-98-4, and AC-98-5 from Examples 2 and 3 ED.sub.50 (iv, mg/kg) Compound Staphylococcus aureus AC-98-1 20 AC-98-2 >32 AC-98-3 3.8 AC-98-4 2.6 AC-98-5 0.6 CLM What is claimed is:

21. A method for preparing substantially pure glycopeptide antibiotic

AC-98-1 comprising the steps of: a.

cultivating a suitable producing strain of Streptomyces hygroscopicus in a suitable culture medium under aerobic conditions to produce a mixture of AC-98 antibiotics containing AC-98-1;

b. recovering said mixture of AC-98 antibiotics containing AC-

98-1; and c. separating and isolating substantially

pure AC-98-1 as the trifluoroacetic acid

salt by reverse phase high pressure liquid chromatography with a mobile phase gradient of about 11%. . .

IT 473721-39-0P, AC 98-5 473722-21-3P, AC 98-1 473722-22-4P, AC

98-2 473722-23-5P, AC 98-3 473722-24-6P, AC 98-4

(substantially pure AC-98 glycopeptide antibiotics)

IT 473722-21-3P, AC 98-1

(substantially pure AC-98 glycopeptide antibiotics)

RN 473722-21-3 USPATFULL

CN Cyclo[glycyl- β -methylphenylalanyl-O-(4-O- α -D-mannopyranosyl-

 α -D-mannopyranosyl)tyrosyl-3-(2-amino-4,5-dihydro-1H-imidazol-4-

yl)seryl-3-(2-amino-4,5-dihydro-1- α -D-mannopyranosyl-1H-imidazol-5-

yl)serylseryl] (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

L29

L30

0 S L28 AND PY<=2001

(FILE 'HOME' ENTERED AT 10:15:12 ON 18 SEP 2006) DEL HIS FILE 'HCAPLUS' ENTERED AT 10:16:11 ON 18 SEP 2006 L13 S (US20040158035 OR US6713448 OR US20030054508)/PN OR (US2004-7 E CARTER/AU E CARTER G/AU L2 369 S E3, E26 E CARTER GUY/AU L3 106 S E3-E6 E HE/AU E HE H/AU L4239 S E3 L5 23 S E19 8 S E21 L6 L7 11 S E41 18 43 S E85 FILE 'REGISTRY' ENTERED AT 10:19:56 ON 18 SEP 2006 L9 5 S 473722-21-3 OR 473722-22-4 OR 473722-23-5 OR 473722-24-6 OR 4 L101 S L9 AND C54H78N12O25 L11 7 S C54H78N12O25 AND OC5/ES AND C6/ES AND NCNC2/ES L12 7 S L11 AND 8/NR 7 S L10, L11, L12 L13 L142 S (464875-69-2 OR 434327-82-7 OR 473722-21-3)/CRN L15 7 S L13, L14 FILE 'HCAOLD' ENTERED AT 10:28:05 ON 18 SEP 2006 0 S L15 L16 FILE 'HCAPLUS' ENTERED AT 10:28:08 ON 18 SEP 2006 L17 16 S L15 L18 2 S AC 98 1 L19 16 S L17, L18 12 S (MANNOPEPTIMYCIN? OR MANNOPEPTIMICIN?) (2A) ALPHA L20 14 S (MANNOPEPTIMYCIN? OR MANNOPEPTIMICIN?) NOT L20 L21 L22 3 S L19-L21 AND (PY<=2001 OR PRY<=2001 OR AY<=2001) L23 3 S L22 AND L1-L8 FILE 'USPATFULL' ENTERED AT 10:31:28 ON 18 SEP 2006 7 S L15 OR L18 L24 L25 2 S L20 OR L21 5 S L24-L25 AND (PY<=2001 OR PRY<=2001 OR AY<=2001) L26 FILE 'HCAPLUS, USPATFULL' ENTERED AT 10:32:26 ON 18 SEP 2006 L27 8 DUP REM L23 L26 (O DUPLICATES REMOVED) FILE 'REGISTRY' ENTERED AT 10:32:42 ON 18 SEP 2006 FILE 'HCAPLUS' ENTERED AT 10:33:00 ON 18 SEP 2006 FILE 'USPATFULL' ENTERED AT 10:33:17 ON 18 SEP 2006 FILE 'BIOSIS' ENTERED AT 10:33:39 ON 18 SEP 2006 3 S L15 OR L18 L28

O S (MANNOPEPTIMYCIN? OR MANNOPEPTIMICIN?) AND PY<=2001

	FILE	EMBASE, ENTERED AT 10:34:25 ON 18 SEP 2006
L31		23 S L15 OR L18 OR MANNOPEPTIMYCIN? OR MANNOPEPTIMICIN?
L32		0 S L31 AND PY<=2001
L33	FILE	'MEDLINE' ENTERED AT 10:34:59 ON 18 SEP 2006 0 S L31 AND PY<=2001
	FILE	'WPIX' ENTERED AT 10:35:28 ON 18 SEP 2006
L34		0 S L18 OR MANNOPEPTIMYCIN? OR MANNOPEPTIMICIN? OR MANNO()(PEPTIM
=>		